

CLAIMS

1. (currently amended): An adjustable stepless hinge shaft ~~comprised of~~
comprising:

a male shaft tube ~~consisting of~~ comprising:

5 a rod member;

a tubular hinge shaft disposed at one extremity of ~~the~~ said rod member;

a mounting section disposed at the opposite extremity of ~~the~~ said rod member;

a female shaft tube ~~consisting of~~ comprising:

10 a tubular sleeve conjoined to ~~the~~ said tubular hinge shaft;

a mounting section at one extremity of ~~the~~ said tubular sleeve;

an adjustment rod that is fastened and sleeve coupled into ~~the~~ said male shaft tube tubular hinge shaft; the features of which are:

~~the~~ said male shaft tube further includes:

15 a flange formed along the surface of ~~the~~ said tubular hinge shaft;

a tapered hole section at one extremity of ~~the~~ said tubular hinge shaft;

a threaded hole section at the opposite extremity of ~~the~~ said tubular hinge shaft;

one or more lengthwise channel on ~~the~~ said tubular hinge shaft;

the said female shaft tube further includes:

a columnar bore in the said tubular sleeve;

an annular groove near the entrance of the said columnar bore;

the said adjustment rod further includes:

5 a tapered rod;

a threaded stud at one extremity of the said tapered rod;

a round projecting edge at the proximal end of the said threaded stud;

a columnar passage in the said tapered rod;

10 a slot through the said tapered rod, the said threaded stud and the said round projecting edge that is thereby articulated along the entire supportive rod component.

2. (currently amended): ~~As mentioned in Claim 1 of the~~ The adjustable stepless hinge shaft of claim 1, wherein invention herein, the said round projecting edge on the said adjustment rod includes a two-sided parallel, square, or polygonal head; or a ~~hexagonal, square or pentagonal socket in the end surface of its~~ circular head having in the end surface of its circular head a hexagonal, square or pentagonal socket.

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3. (currently amended): ~~As mentioned in Claim 1 of the~~ The adjustable stepless

hinge shaft ~~invention herein of claim 1~~, the present invention further includes:

~~the~~ said male shaft tube tubular hinge shaft ~~has~~ having a tapered tubular aspect at its outer end that is of a larger diameter;

5 ~~the~~ said female shaft tube tubular sleeve ~~has~~ having a through-hole formed at the bottom portion of ~~its~~ said columnar bore;

~~the~~ said adjustment rod ~~lacks the said round projecting edge at its proximal end,~~
~~but instead has the~~ having a said hexagonal, pentagonal, or square socket or two-sided parallel head disposed at the proximal end of its tapered rod.

4. (currently amended): ~~As mentioned in Claim 1 and Claim 3 of the~~ The
10 adjustable stepless hinge shaft of claim 1 or claim 3, wherein ~~invention herein,~~
~~the present invention includes~~ a plurality of annular oil grooves are formed along the surface of ~~the~~ said male shaft tube tubular hinge shaft.